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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,452	04/13/2004	James L. Hendrix	TWI-24110	4696
28584	7590	05/09/2007	EXAMINER	
STALLMAN & POLLOCK LLP			STAFIRA, MICHAEL PATRICK	
353 SACRAMENTO STREET			ART UNIT	PAPER NUMBER
SUITE 2200				
SAN FRANCISCO, CA 94111			2886	
			MAIL DATE	DELIVERY MODE
			05/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/823,452	HENDRIX ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael P. Stafira	2886	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on amendment filed 2/26/2007.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,7 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,7 and 15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 April 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 7, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by DeBaryshe et al. ('364).

### **Claim 1**

DeBaryshe et al. ('364) discloses an illumination source that generates a probe beam (Fig. 8, Ref. 812, 813); a series of optical components (See Fig. 8) that cause a portion of the probe beam to be reflected by a measurement area on the sample surface and subsequently transported to a detector (Fig. 8, Ref. 831), where the series of optical components includes at least one mirror (Fig. 8, Ref. 826, 834)(off-axis parabolic mirror Col. 34, lines 6-12, which would meet applicant's conditions for a highly reflective optical element); and a processor (Fig. 8, Ref. Computer) for analyzing signals generated by the detector (Fig. 8, Ref. 829)(See Abstract).

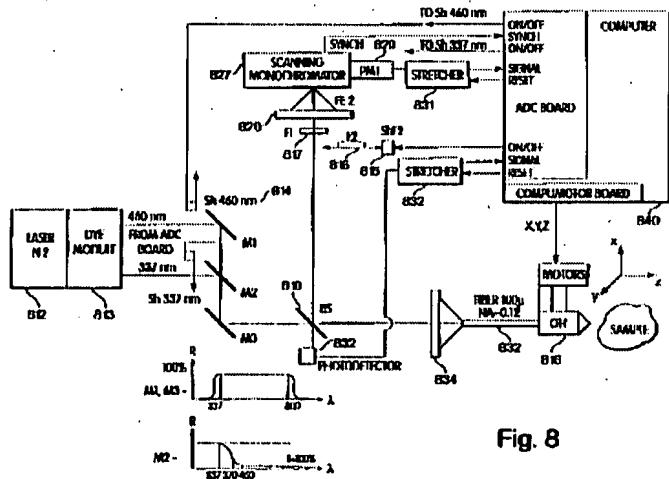


Fig. 8

**Claim 7**

DeBaryshe et al. ('364) discloses an illumination source that generates a probe beam (Fig. 8, Ref. 812, 813); a series of optical components (See Fig. 8) that cause a portion of the probe beam to be reflected by a measurement area on the sample surface (Fig. 8, Ref. M1-M3); a second series of optical components with at least one mirror (Fig. 8, Ref. 826, 834)(off-axis parabolic mirror Col. 34, lines 6-12, which would meet applicant's conditions for a highly reflective optical element) that gather the illumination to the detector (Fig. 8, Ref. 831), and a processor (Fig. 8, Ref. Computer) for analyzing signals generated by the detector (Fig. 8, Ref. 829)(See Abstract).

**Claim 15**

DeBaryshe et al. ('364) discloses an illumination source that generates a probe beam (Fig. 8, Ref. 812, 813); a series of optical components (See Fig. 8) that cause a portion of the probe beam to be reflected by a measurement area on the sample surface and subsequently transported to a detector (Fig. 8, Ref. 826, 834)(off-axis parabolic mirror Col. 34, lines 6-12,

which would meet applicant's conditions for a highly reflective optical element), the series of optical components include at least one mirror (Fig. 8, Ref. 826, 834); and a processor (Fig. 8, Ref. Computer) for analyzing signals generated by the detector (Fig. 8, Ref. 829)(See Abstract).

***Response to Arguments***

3. Applicant's arguments filed 2/26/2007 have been fully considered but they are not persuasive.

Applicant takes the position for claim 1 that the reference of DeBaryshe fails to disclose  $TSE(D) \leq 2e^{-0.15D}$  etc.. The examiner takes the position that the equation  $TSE(D) \leq 2e^{-0.15D}$  fails because while a scientific truth, or the mathematical expression of it, is not patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be; Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. In this case the claim limitations fail to provide a useful structure from the  $TSE(D) \leq 2e^{-0.15D}$  and therefore, is not a patentable limitation. For example the equation would need values for the equation, which would define a mirror meeting a certain condition. Therefore, the rejection of claim 1 stands as stated in the above paragraphs.

Applicant further takes the position on claims 7 and 15 that the reference of DeBaryshe fails to disclose the series of optical components transports at least 99% of the gathered illumination to a detector or at least 99% of the portion of the probe beam that is reflected by the measurement areas reaches the detector. Examiner takes the position that the reference of DeBaryshe shows in the figures that all the light "reflected"(48) from the measurement object (18) is reached from the detector (24). Since the reference of DeBaryshe silent in providing

evidence in the specification or the figures wherein reflected light is not being measured it is assumed that 100% of the reflected light reaches the detector. One would want in the optical detection art to have at least 100% of the light reaching the detector because anything less would be missed data on the object which would decrease the accuracy of the measurement. Therefore, the rejection of claims 7 and 15 stand as rejected in the above paragraphs.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur Chowdhury can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael P. Stafira  
Primary Examiner  
Art Unit 2886

May 4, 2007